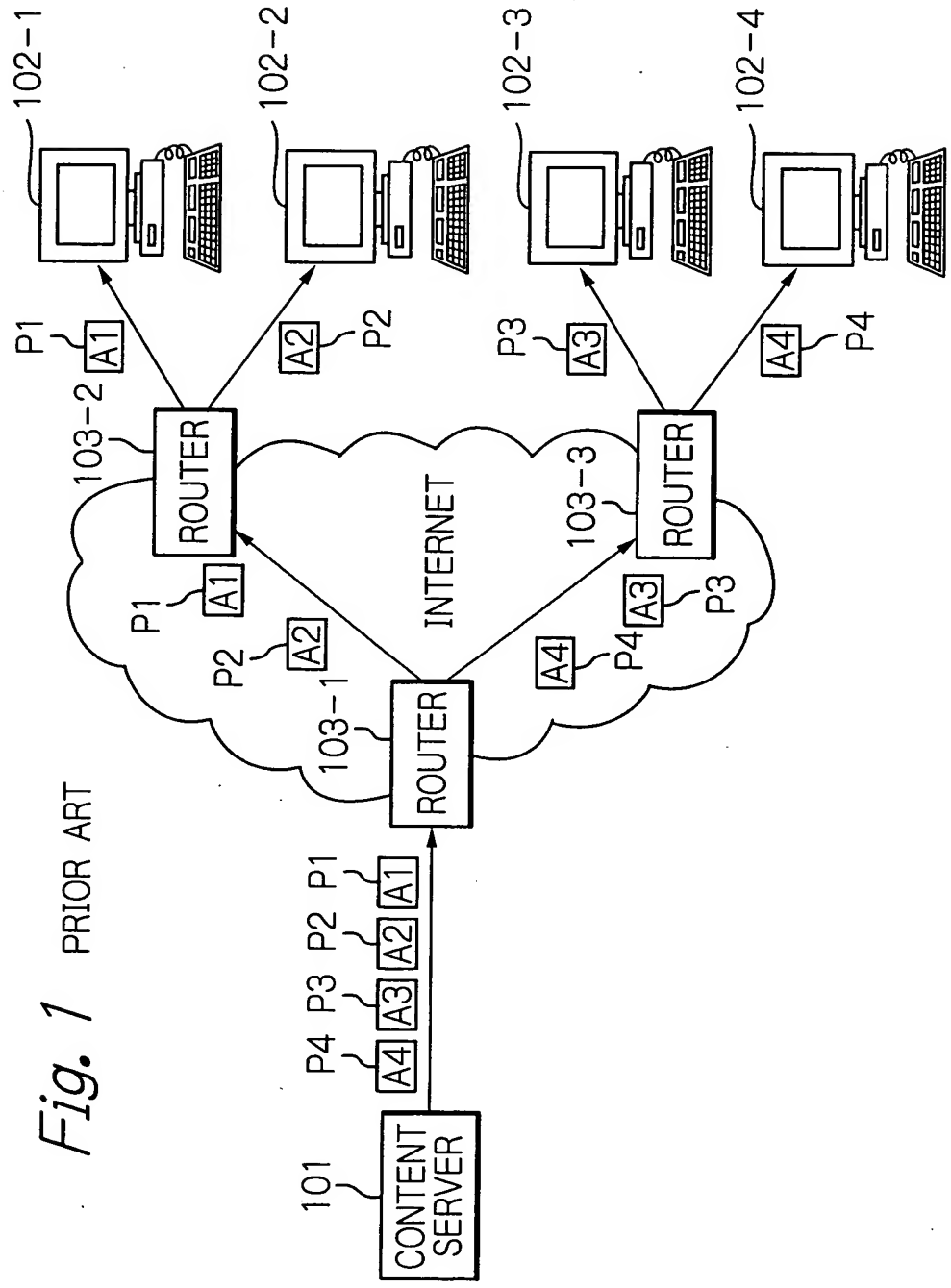


Fig. 1 PRIOR ART

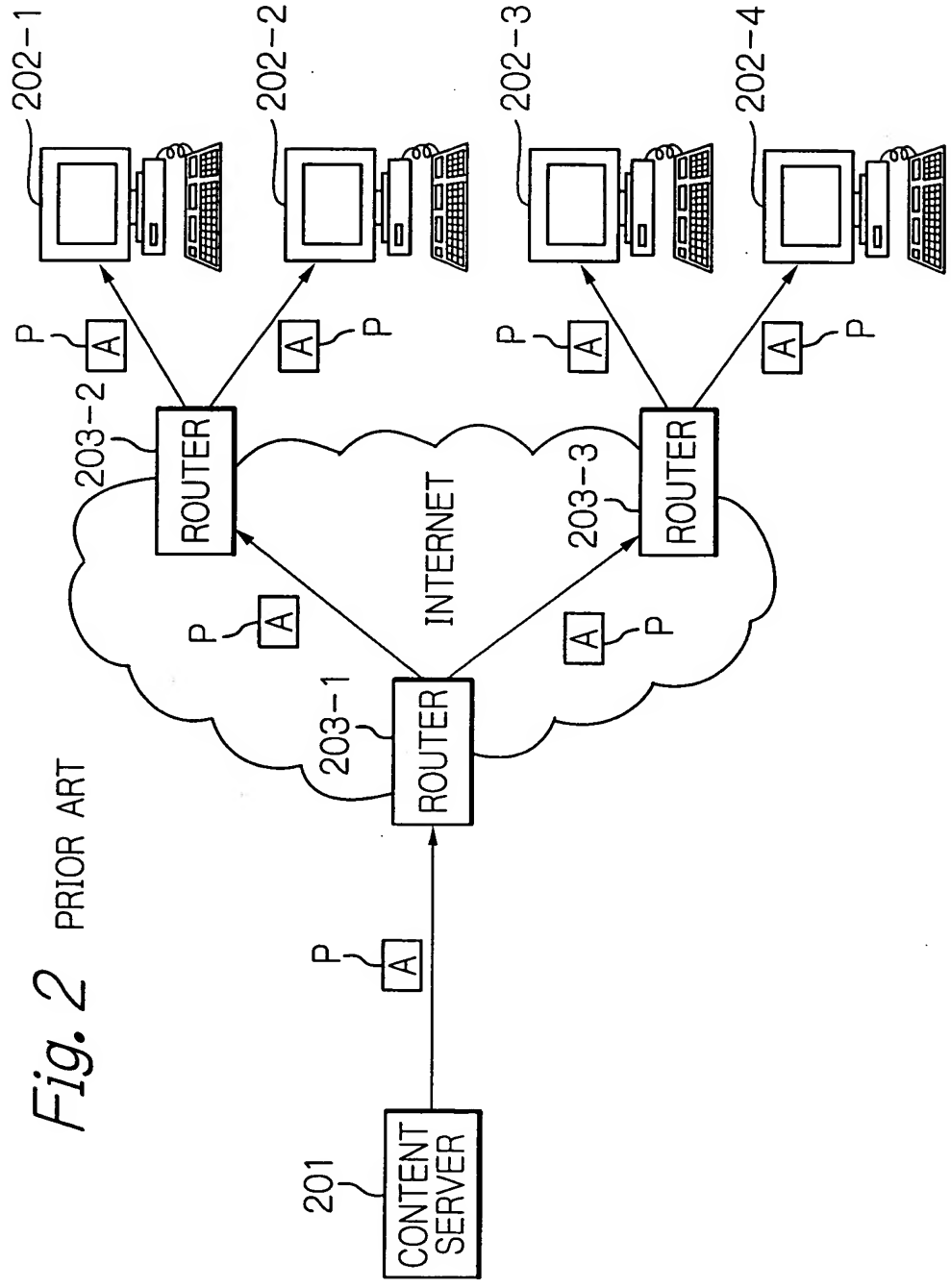


Fig. 2 PRIOR ART

Fig. 3

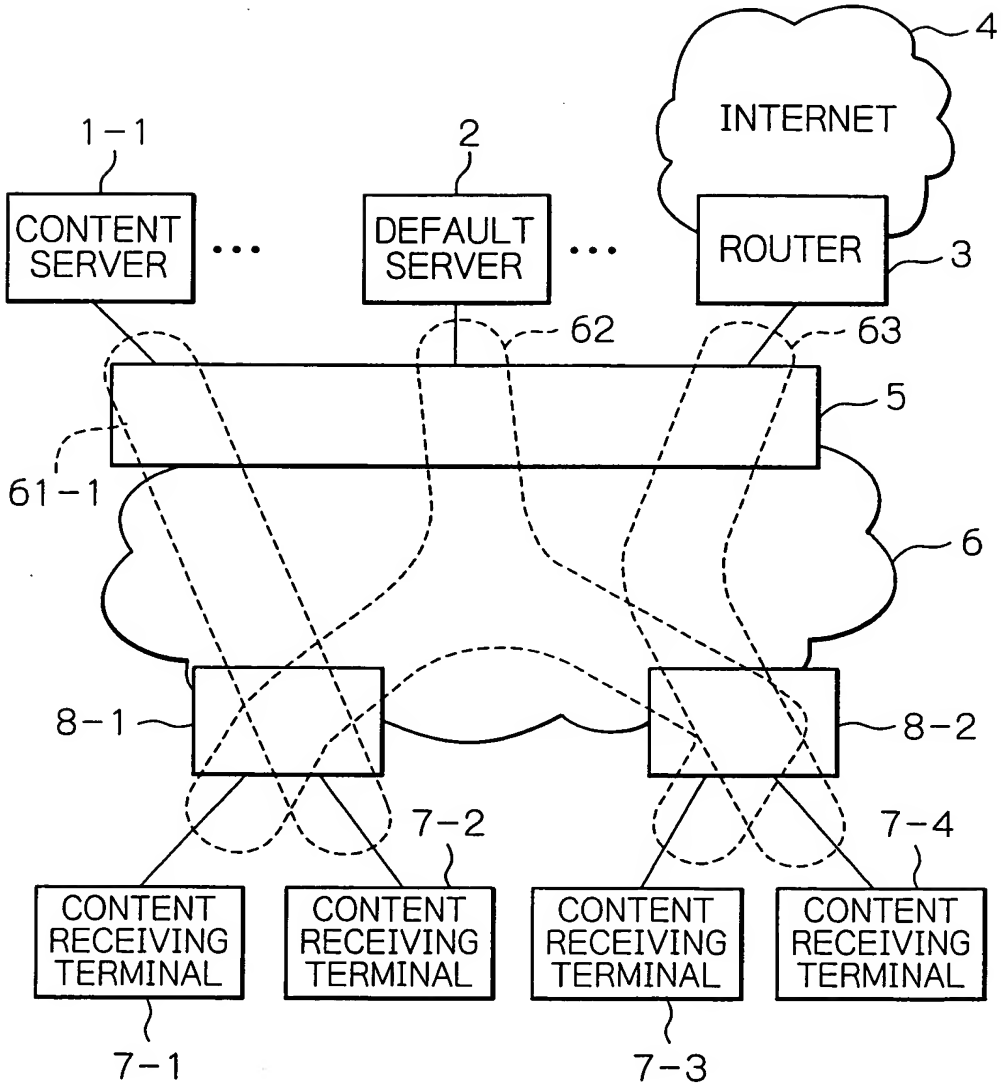

4
INTERNET
1-1
2
CONTENT SERVER
DEFAULT SERVER
ROUTER
3
62
63
5
61-1
6
8-1
8-2
7-2
7-4
CONTENT RECEIVING TERMINAL
CONTENT RECEIVING TERMINAL
CONTENT RECEIVING TERMINAL
CONTENT RECEIVING TERMINAL
7-1
7-3

Fig. 4

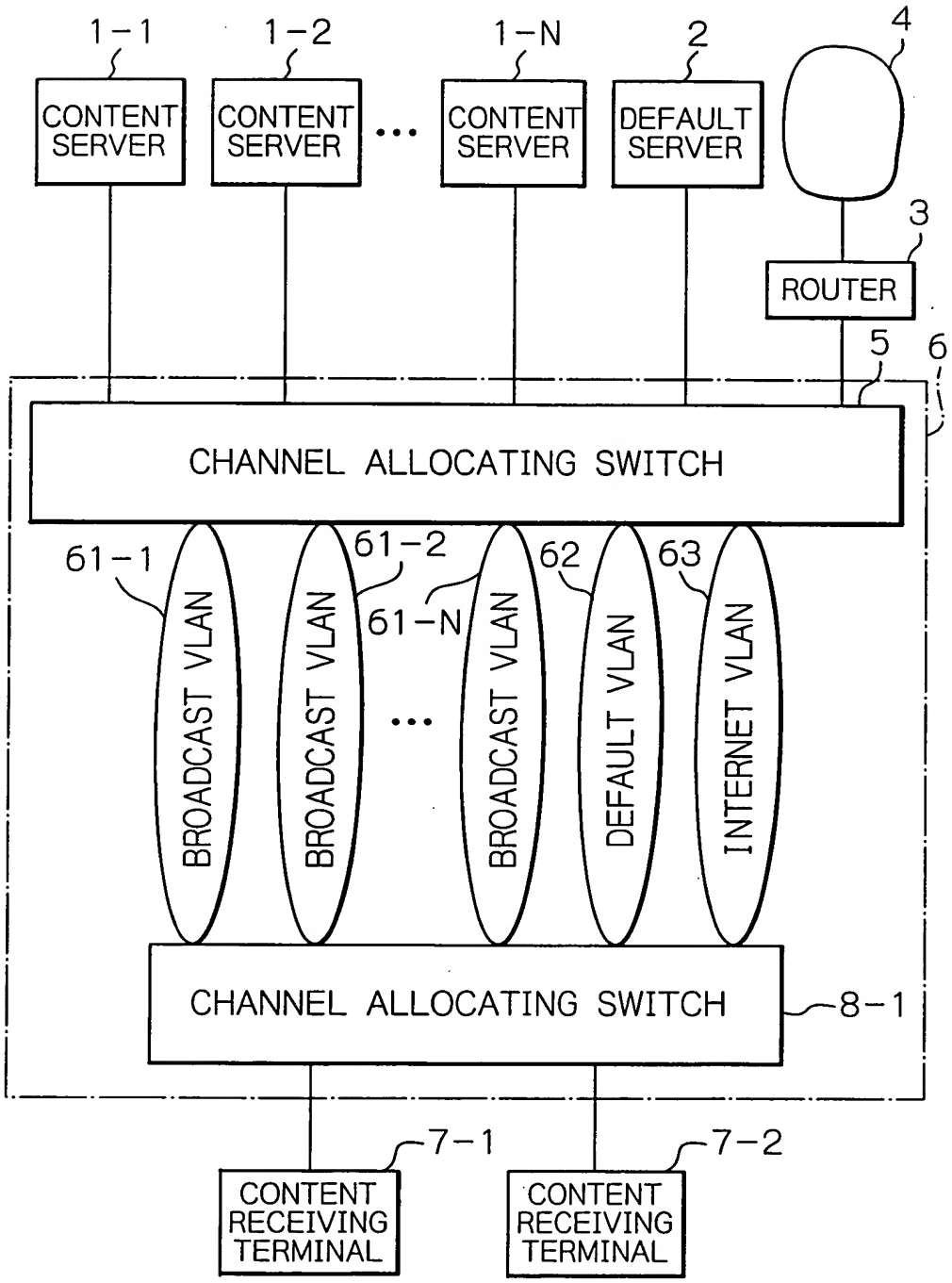

1-1
1-2
1-N
2
4
CONTENT SERVER
CONTENT SERVER
CONTENT SERVER
DEFAULT SERVER
3
ROUTER
5
6
CHANNEL ALLOCATING SWITCH
61-1
61-2
61-N
62
63
BROADCAST VLAN
BROADCAST VLAN
BROADCAST VLAN
DEFAULT VLAN
INTERNET VLAN
CHANNEL ALLOCATING SWITCH
8-1
7-1
7-2
CONTENT RECEIVING TERMINAL
CONTENT RECEIVING TERMINAL

Fig. 5A

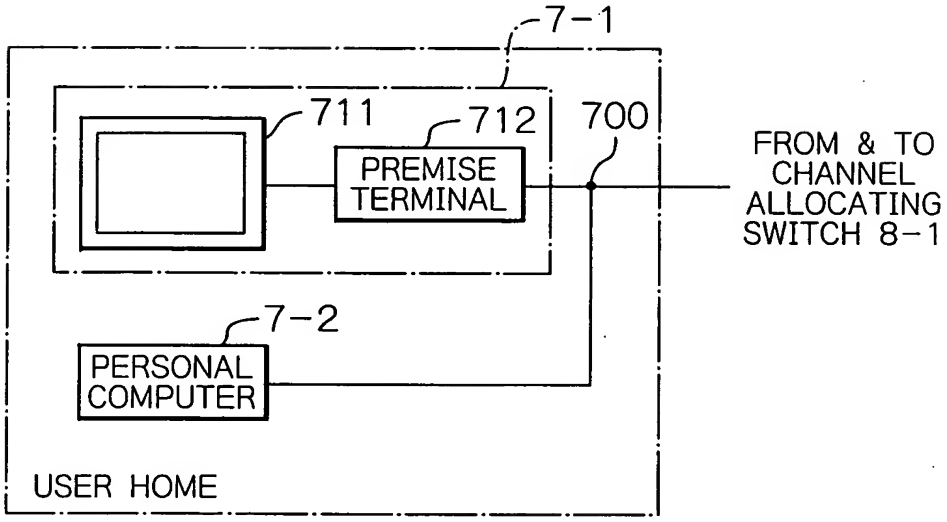

7-1
711
712
700
PREMISE TERMINAL
FROM & TO CHANNEL ALLOCATING SWITCH 8-1
7-2
PERSONAL COMPUTER
USER HOME

Fig. 5B

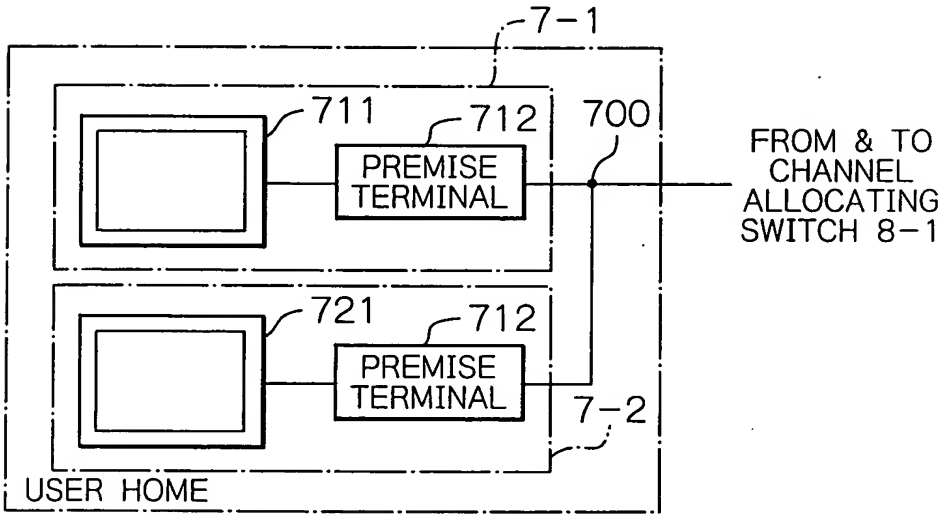

7-1
711
712
700
PREMISE TERMINAL
FROM & TO CHANNEL ALLOCATING SWITCH 8-1
721
712
PREMISE TERMINAL
7-2
USER HOME

Fig. 6

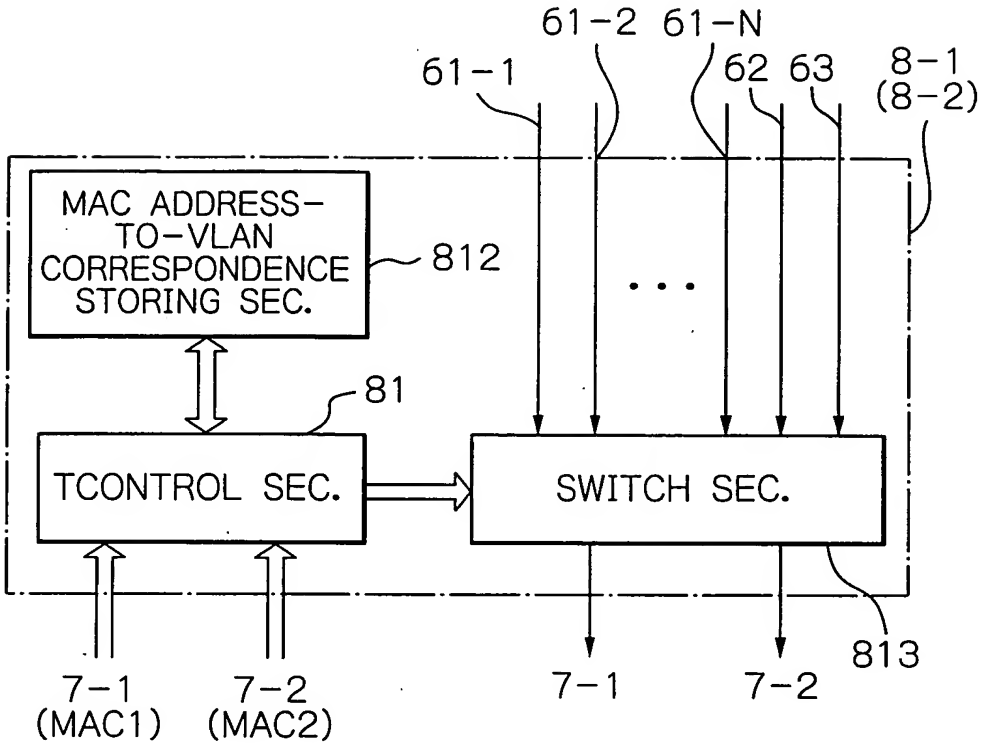


Fig. 7

812

MAC	VLAN
MAC 1	-
MAC 2	61-2

Fig. 8

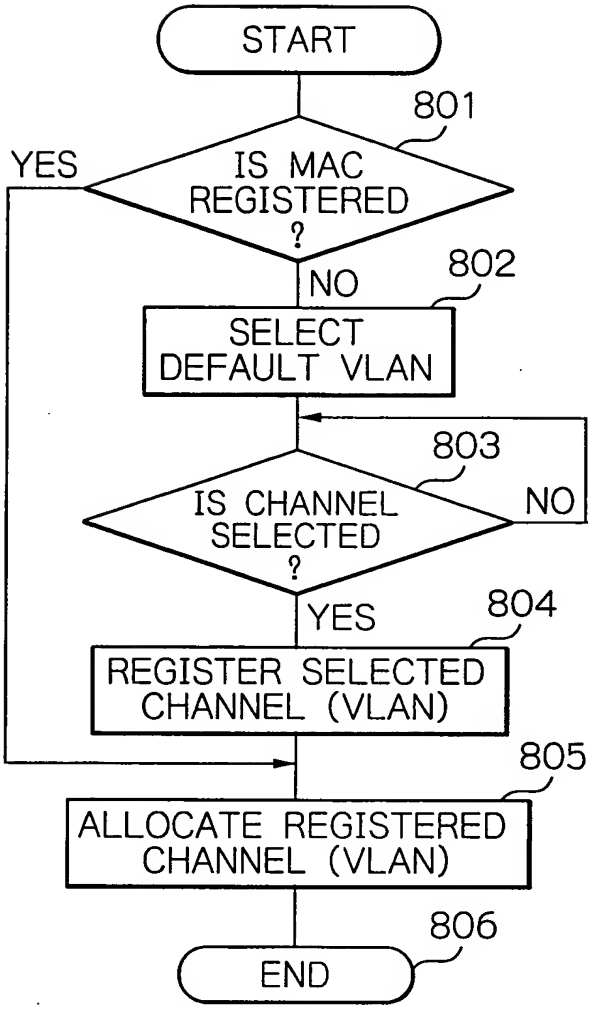

START
801
IS MAC REGISTERED ?
YES
NO
802
SELECT DEFAULT VLAN
803
IS CHANNEL SELECTED ?
NO
YES
804
REGISTER SELECTED CHANNEL (VLAN)
805
ALLOCATE REGISTERED CHANNEL (VLAN)
806
END

Fig. 9

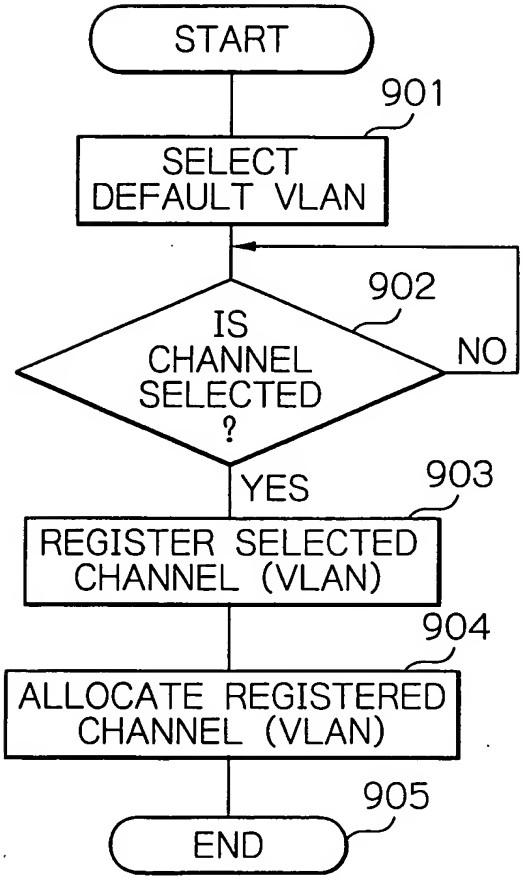

START
901
SELECT DEFAULT VLAN
902
IS CHANNEL SELECTED ?
NO
YES
903
REGISTER SELECTED CHANNEL (VLAN)
904
ALLOCATE REGISTERED CHANNEL (VLAN)
905
END

Fig. 10

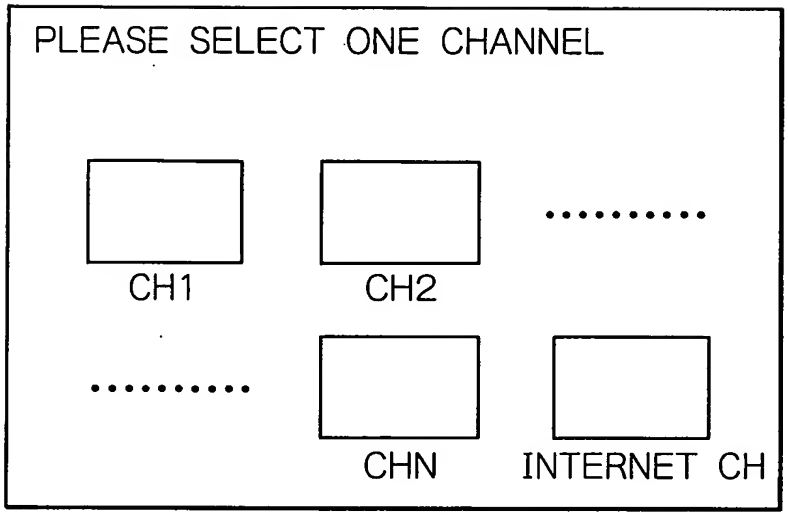


Fig. 11

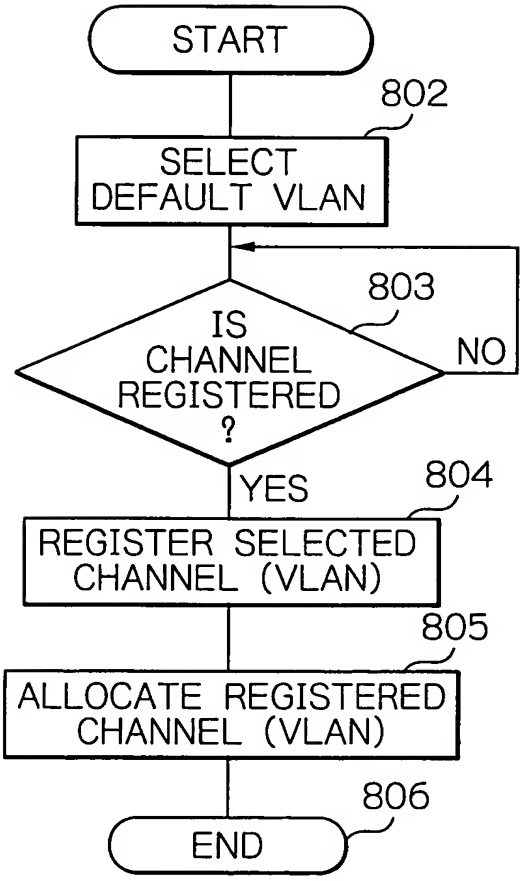

START
802
SELECT DEFAULT VLAN
803
IS CHANNEL REGISTERED ?
NO
YES
804
REGISTER SELECTED CHANNEL (VLAN)
805
ALLOCATE REGISTERED CHANNEL (VLAN)
806
END

Fig. 12

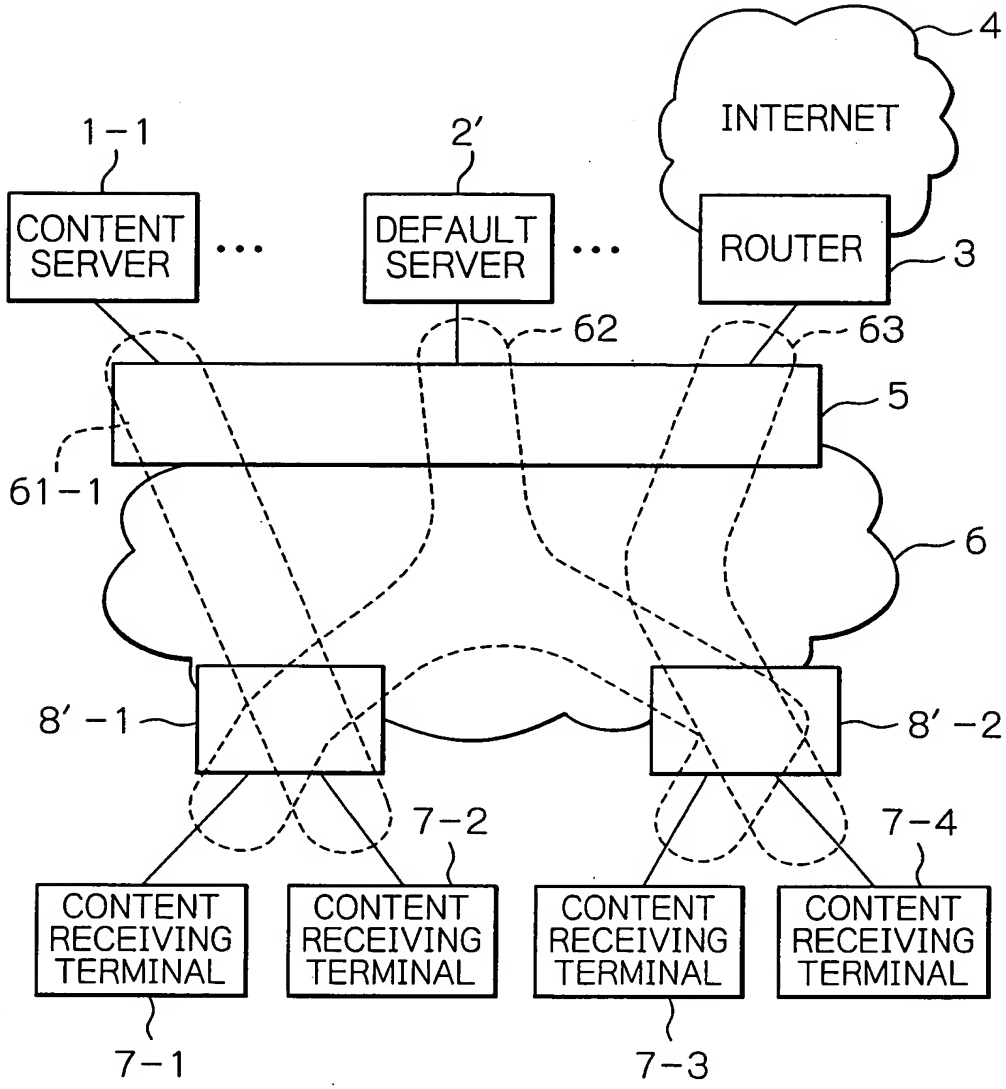

4
INTERNET
1-1
2'
CONTENT SERVER
DEFAULT SERVER
ROUTER
3
62
63
5
61-1
6
8'-1
8'-2
7-2
7-4
CONTENT RECEIVING TERMINAL
CONTENT RECEIVING TERMINAL
CONTENT RECEIVING TERMINAL
CONTENT RECEIVING TERMINAL
7-1
7-3

Fig. 13

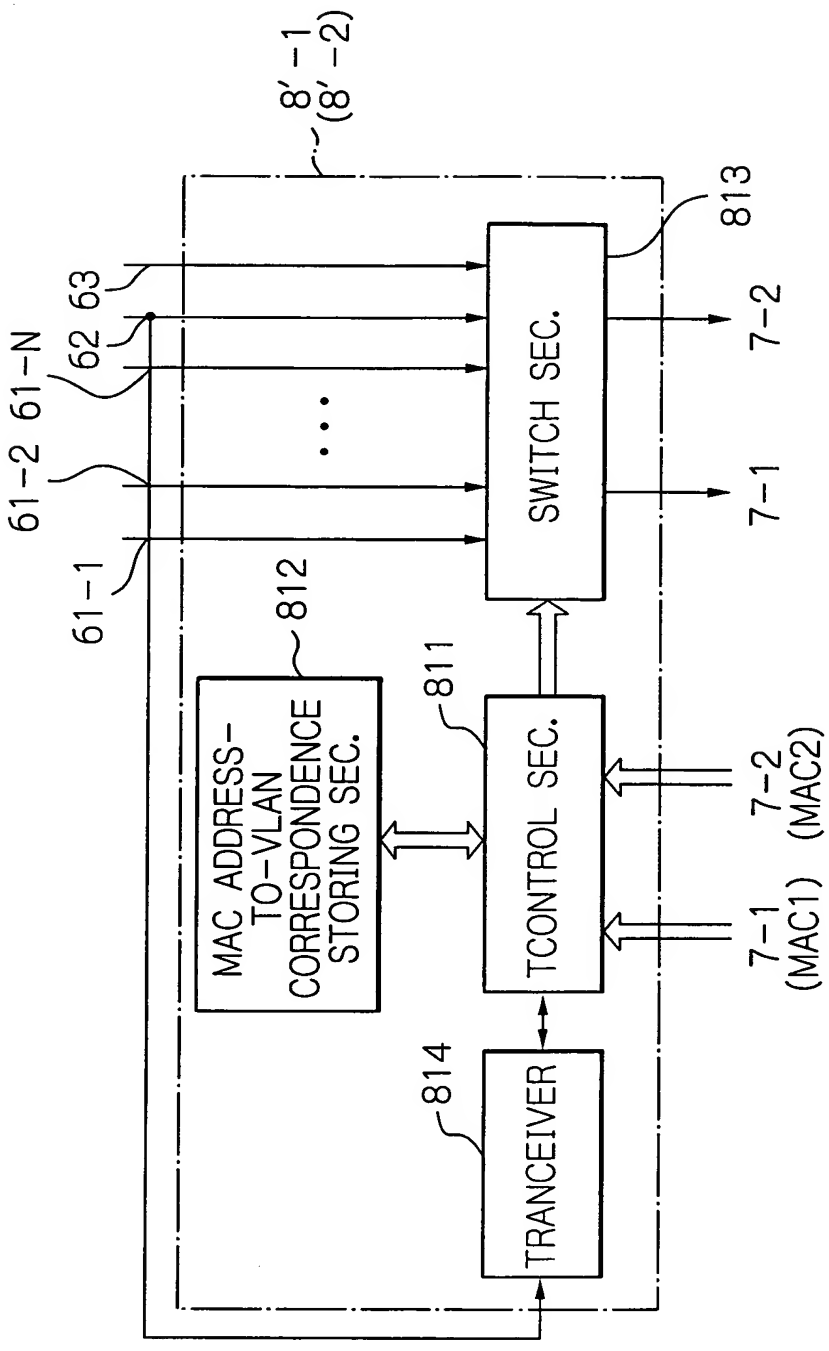

8'-1 (8'-2)
813
SWITCH SEC.
63
62
61-N
61-2
61-1
7-2
7-1
812
MAC ADDRESS-TO-VLAN CORRESPONDENCE STORING SEC.
811
TCONTROL SEC.
7-2 (MAC2)
7-1 (MAC1)
814
TRANCEIVER

Fig. 14

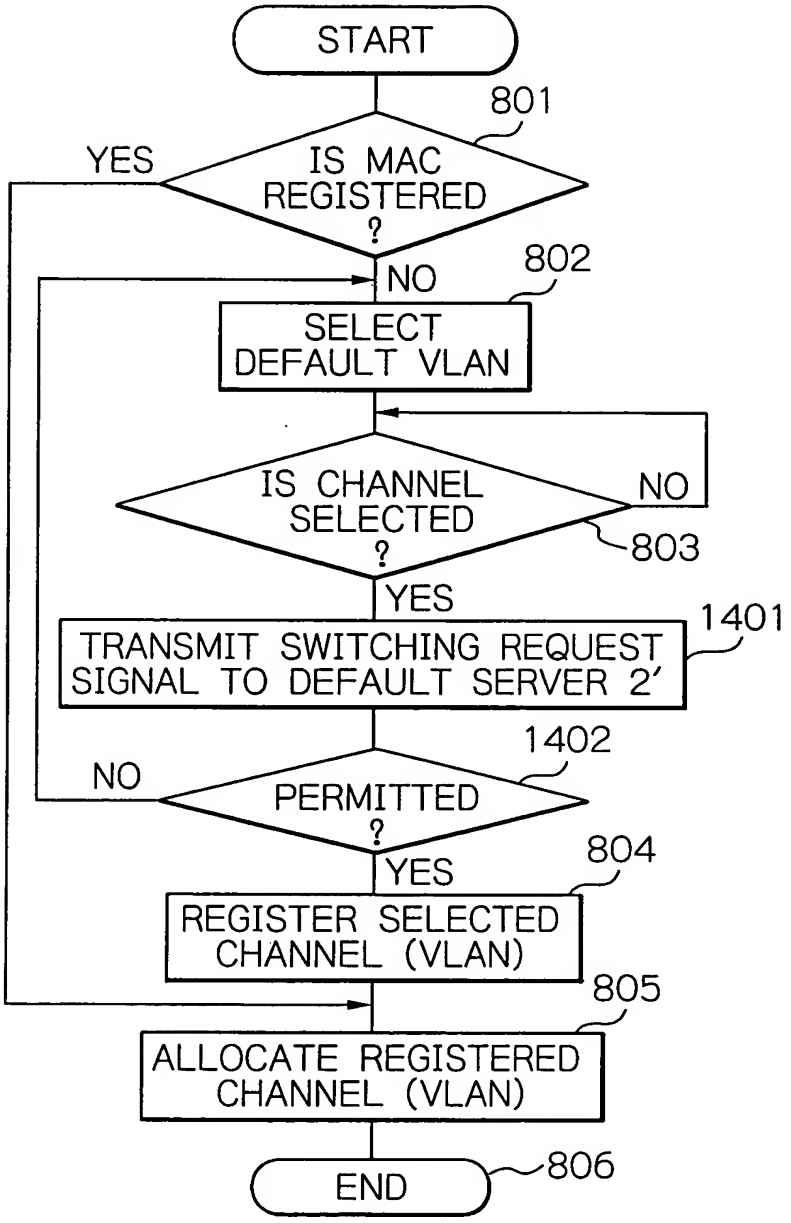

START
801
IS MAC REGISTERED ?
YES
NO
802
SELECT DEFAULT VLAN
IS CHANNEL SELECTED ?
NO
803
YES
TRANSMIT SWITCHING REQUEST SIGNAL TO DEFAULT SERVER 2'
1401
1402
PERMITTED ?
NO
YES
804
REGISTER SELECTED CHANNEL (VLAN)
805
ALLOCATE REGISTERED CHANNEL (VLAN)
END
806

Fig. 15

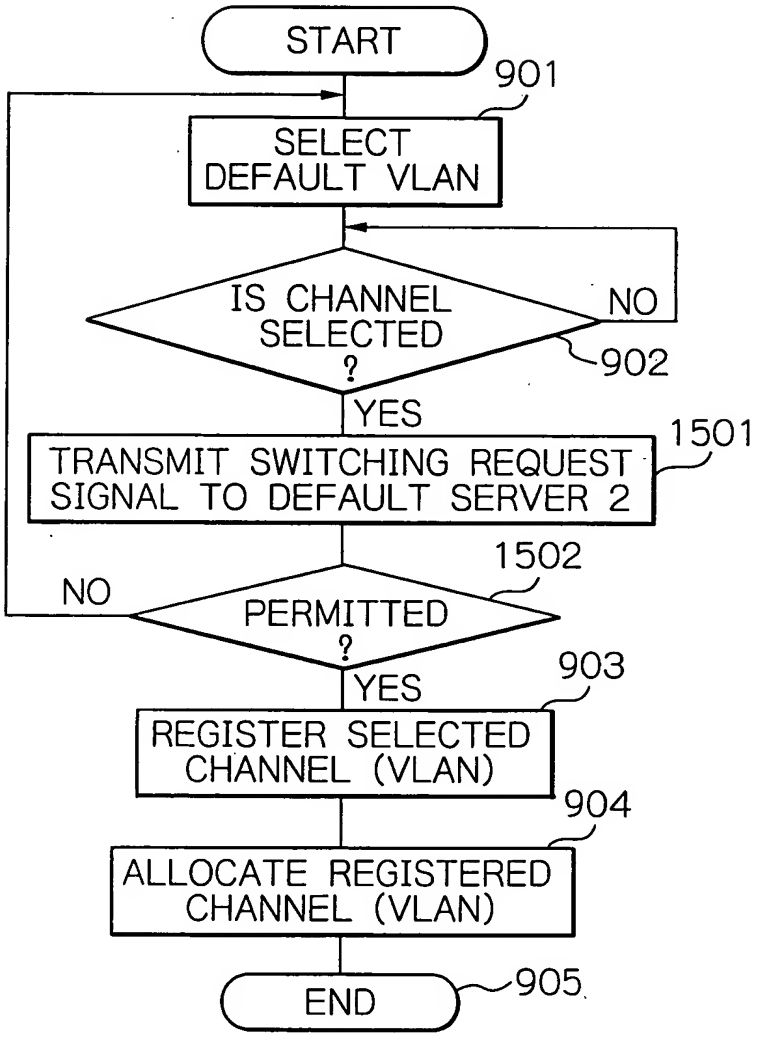
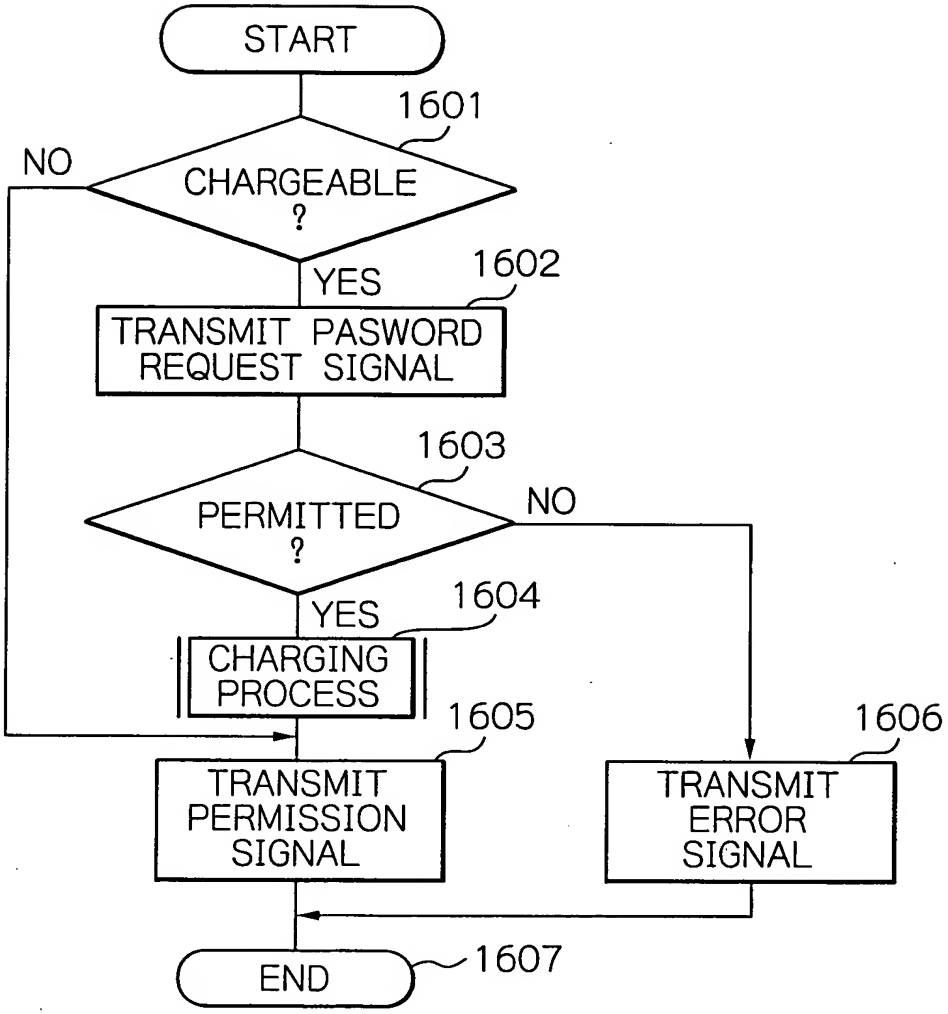

START
901
SELECT DEFAULT VLAN
IS CHANNEL SELECTED ?
NO
902
YES
TRANSMIT SWITCHING REQUEST SIGNAL TO DEFAULT SERVER 2
1501
1502
NO
PERMITTED ?
YES
903
REGISTER SELECTED CHANNEL (VLAN)
904
ALLOCATE REGISTERED CHANNEL (VLAN)
END
905

Fig. 16


START
1601
CHARGEABLE ?
NO
YES
1602
TRANSMIT PASWORD REQUEST SIGNAL
1603
PERMITTED ?
NO
YES
1604
CHARGING PROCESS
1605
TRANSMIT PERMISSION SIGNAL
1606
TRANSMIT ERROR SIGNAL
END
1607

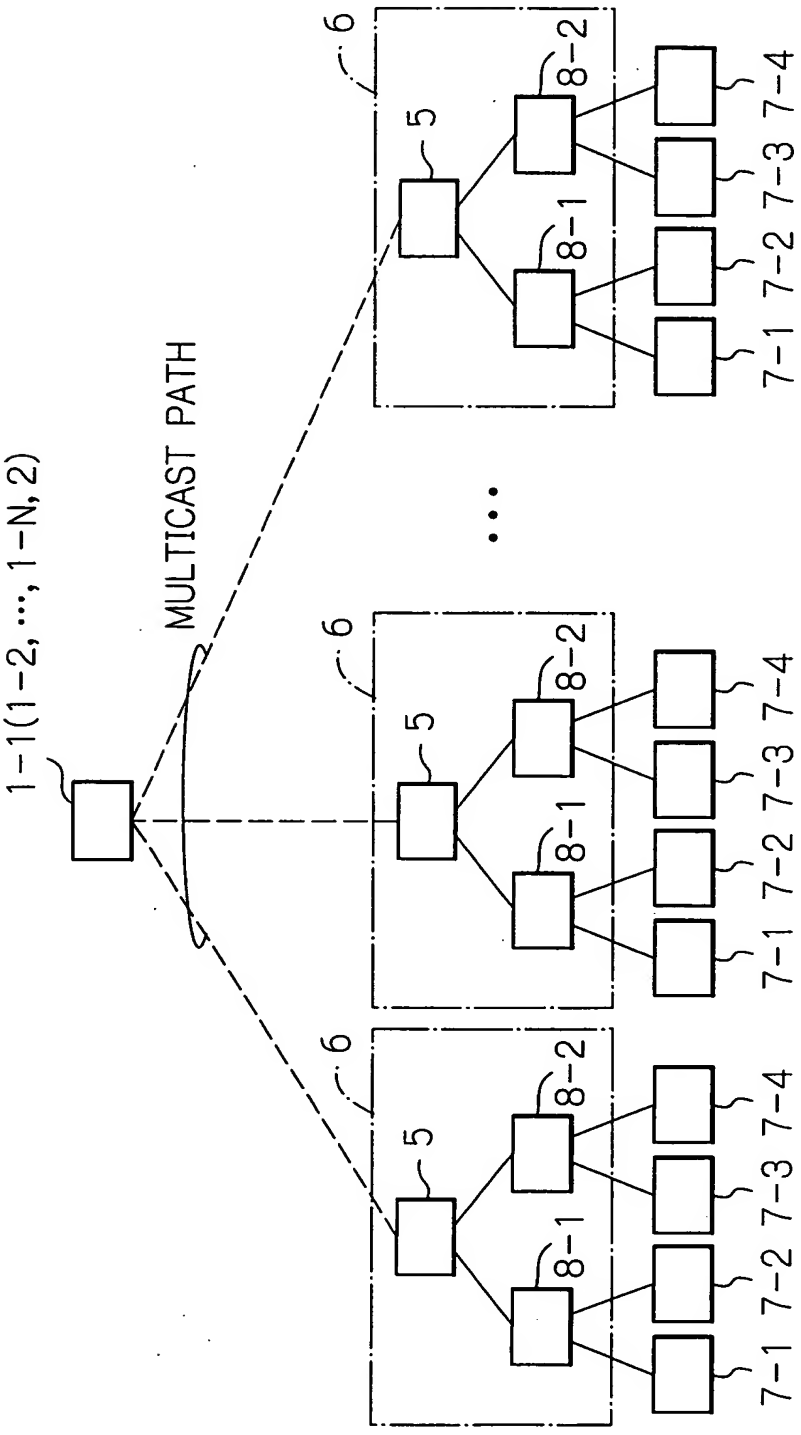



Fig. 17